## **MONITORING WELL No. EWC002**

Logged By: Micheal Lewis Checked By: Micheal Rendina **Driller:** Cascade Drilling **Drilling Method:** Sonic Drilling

Date Started: 10/17/06 Date Completed: 10/20/06 Northing: 1768367.68 Easting: 6470266.69 Elevation: 51.76 Feet Sampling Method: NA Sampling Interval: Continuous Core Boring Depth: 125 Feet

Client: Boeing Realty Corp. Site: Former C-6 Facility

Location: Los Angeles, California

Project No.: 1155.002

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Depth (ft)	Sample Number	Sample Depth	Blow Count (per foot)	OVM (ppm)	Graphic Log	Soil Classification	Description	Well C D	ompletio etails	òn
0-					ैह( <u>र</u> ्व :१३ह) (वन्द्राह) श्रे		.8" Concrete		N . A .	
2-						ML/CL	Brown (10YR 4/3), CLAYEY SILT/SILTY CLAY, moist, stiff, plastic, little fine-grained sand. Brick and concrete debris - reworked - base.  Note: Brick and concrete debris.	Traffic Rated Well Box		Ships ⊐
4— - -										Bentonite Chips
6- -										ш.
8— 8—						ML	Brown (10YR 4/3); SILT, moist, stiff, trace clay, little fine-grained sand.			∋rout <sup>_</sup>
- 10-										Bentonite (
- 12-				0.0						Portland Cement w/ 5% Bentonite Grout
- - - -				0.0						Portland Ce
14 — - -										-
16—								lank		
- 18-				0.0		ML	Grayish brown (10YR 5/2), SILT, moist, firm, some very fine-grained sand.	4" Sch 80 PVC Blank		
- -								4" Sch		



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Depth (ft)	Sample Number	Sample Depth	Blow Count (per foot)	ОУМ (ррт)	Graphic Log	Soil Classification	Description	Well Completion Details
-				0.0		CL	Dark grayish brown (10YR 4/2), CLAY, moist, stiff to hard, moderately plastic, little silt and fine sand, few caliche nodules.	
22-				0.0		SM	Yellowish brown (10YR 5/4), SILTY SAND, moist, poorly graded, fine- to very fine-grained.	
24-								
26— - -								
28 — - - -								
30-				0.0		CL.	Brown (10YR:4/3), CLAY, moist, plastic, firm, some silt, trace fine-grained sand.	
32—							Light yellowish brown (10YR 5/4), SAND, moist, poorly graded, fine- to very fine-grained, little silt.	
34— -					36 (F) 3	SP	Yellowish brown (10YR 5/6), SAND, moist, poorly graded, fine-grained	
36— - -								
- 38- - -				0.0	3615 3615 3615 3616 3616 3616 3616 3616		Light yellowish brown (10YR 5/4), SAND, slightly moist, poorly graded, fine- to very fine-grained, little silt.	
- 40 <i>-</i> -					10 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16			



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Depth (ft)	Sample Number	Sample Depth	Blow Count (per foot)	ОVМ (ррт)	Graphic Log	Soil Classification	Description Well Completion Details
42—						SP	
- 44 - -				0.0		ML	Olive brown (2.5Y 4/4), SILT, moist, firm, little fine-grained sand, oxidation stained veinlets throughout.
46— - - 48—							
50-				0.0			;as above with 30% fine-grained sand.
52—				0.0		SP	Brown (10YR 4/3), SAND, moist, dense, poorly graded, fine- to very fine-grained, trace silt.
54 — -				0.0		ML	Dark yellowish brown (10YR 4/4), SILT, moist to very moist, firm, some very fine-grained sand, trace clay, micaceous.
56—						SM	Dark yellowish brown (10YR 4/4), SILTY SAND, moist, dense, poorly graded, very fine-grained, micacous.
58—				0.0		ML	Light olive brown (10YR 5/4), SILT, moist, firm, little very fine-grained sand, trace clay.
- 60 —							



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Elevation: 51.76 Feet Boring Depth: 125 Feet Client: Boeing Realty Corp. Site: Former C-6 Facility

Location: Los Angeles, California

Project No.: 1155.002

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Depth (ft)	Sample Number	Sample Depth	Blow Count (per foot)	OVM (ppm)	Graphic Log	Soil Classification	Description	Well Completion Details
62— - - - 64—				1.4		SM	Light olive brown (2.5Y 5/4), SILTY SAND, moist, poorly graded, very fine-grained.  Light olive brown (2.5Y 5/4), SILTY SAND, very moist, thin interbeds of fine-grained sand.	
- 66 —				0.0		ML	Olive brown (2.5Y 4/3), SILT, very moist to wet, micaceous, trace clay.  Olive brown (2.5Y 4/4), SAND, wet, poorly	
- - 68-				0.7		SP	graded, very fine-grained, little silt. Groundwater encountered at approximately 67 feet. Olive brown (2.5Y 4/4), SAND, saturated, poorly graded, fine-grained, oxidation staining, thin zone of saturation.	=
70—				0.0			;as above, wet, poorly graded, fine-grained.	
72—				0.0		SM	;as above. Olive brown (2.5Y 4/4), SANDY SILT/SILTY	
74 —				0.0		SP	SAND, moist to very moist, stiff, very fine-grained sand, thin silt interbeds approximately 4" thick.  Olive brown (2.5Y 4/4), SAND, very moist, poorly	
76—				0.3		<b>5</b> r	graded, fine-grained.  Olive brown, SILT, very moist, firm, some very	
- 78-						ML	fine-grained sand, some oxidation staining, micacous.	
- - 80-						SM	Olive brown (2.5Y 4/4), SILTY SAND, very moist, stiff, very fine- to fine-grained, some oxidation staining in veinlets.	



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Boring Depth: 125 Feet

Client: Boeing Realty Corp. Site: Former C-6 Facility

Location: Los Angeles, California

Project No.: 1155.002

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Depth (ft)	Sample Number	Sample Depth	Blow Count (per foot)	OVM (ppm)	Graphic Log	Soil Classification	Description	We	II Co Det	mple lails	etion
						ML	Olive brown (2.5Y 4/4), SILT, moist to very moist, firm, little fine-grained sand, some clay				
82-				0.0		SP	Olive brown (2.5Y 4/3), SAND, wet to saturated, poorly graded, fine-grained, 15% medium-grained, some zones with silt, oxidation staining (faint), shells at 83 feet.				
84 —				0.0		ML	Light olive brown (2.5Y 5/4), CLAYEY SILT, moist, stiff, crumbly with abundant shells.  Note: Outer conductor casing set at 85 feet: Install bentonite pellet seal. Continue drilling with inner casing.	or Casing Ţ			
86— - - - 88—						SM	Light olive brown (2.5Y 5/3), SILTY SAND, very moist, poorly graded, fine-grained, little clay, abundant shells and shell fragments throughout.	Outer Conductor Casing			
90-						SP	Light olive brown, (2.5Y 5/4), SAND, wet, poorly graded, fine-grained, faint oxidation staining.				ets _
92—				0.0		CL	Olive brown (2.5Y 5/4), CLAY, moist, firm, approximately 6" thick, plastic, oxidation staining				Bentonite Pellets
				0.0		SP	\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\				m
94 — - - 96 —				0.0		CL	Olive brown (2.5Y 4/3), CLAY, moist, firm to stiff, plastic, some silt, oxidation staining in thin layers.				
96 —				0.0		SP	Light olive brown, (2.5Y 4/3), SAND, wet to saturated, poorly graded, fine-grained.			•	3 Sand
- - 100 —				0.0		CL	Olive brown (2.5Y 4/4), CLAY, moist, stiff, plastic, some silt, little oxidation staining.				#3



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Site: Former C-6 Facility

Location: Los Angeles, California

Project No.: 1155.002

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Depth (ft)	Sample (H) Number	Sample Depth	Blow Count (per foot)	OVM (ppm)	Graphic Log	Soil Classification	Description	Well		om eta	pletion ils	
						SM	Olive brown, SILTY SAND, little clay.					
102—				0.0		ĞĹ	Olive brown (2.5Y 4/4), CLAY, moist, stiff, plastic.					
104 — -				0.0		SP	Light olive brown, (2.5Y 4/3), SAND, wet, poorly graded, fine-grained, 5% medium-grained, abundant small shell fragments throughout.					
106—						CL	Olive brown (2.5Y 4/4), CLAY with SILT, moist, stiff, slightly plastic, oxidation staining in thin layers.	'C 0.02" Slot				
- 108-				0.0	NCIP N	SP	Light olive brown, (2.5Y 4/3), SAND, wet, poorly graded, fine-grained, no shells, fining graduationally upward over 6" into overlying clay.	4" Sch 80 PVC 0.02" Slot				
- 110 <i>-</i> -				0.0	icheves		;as above, very fine-graned, little silt.					
- 112—						SW	4" Layer of GRAVELLY SAND, bi-modally graded fine sand with medium to large subanglular gravel, oxidation staining.		1998年の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の			
- 114 <i>-</i> -				0.0		SP	Light olive brown, (2.5Y 5/3), SAND, wet, poorly graded, very fine- to fine-grained, thin intervals with little fine- to coarse-grained subangular gravel.					
- - -					7777777		Olive brown (2.5Y 4/3), SAND, wet, poorly graded, fine-grained, faint oxidation staining, no shells.					
116— -				0.0		CL	Olive (5Y 4/4), CLAY, moist, hard, plastic, oxidation stained, scour contact with overlying sand.			ıΞI		
- 118 - -				0.0		ML	Olive (5Y 4/4), CLAYEY SILT, moist to very moist, slightly plastic, occasional interbeds of sandy silt.					
- 120 <i>-</i> -												



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128—  128—  128—  128—  128—  128—  128—  128—  128—  128—  128—  138—	Depth (ft)	Sample Number	Sample Depth	Blow Count (per foot)	OVM (ppm)	Graphic Log	Soil Classification	Description	Well Completion Details
Destrict fine-grained sand, faint oxidation staining.   Destrict fine-grained sand, faint oxidation staining.	_ 				0.0		·· ML···		
poorty graded, very fine to fine-grained, faint oxidation staining.  Well Detail  0 to 96	22 <u> </u>				0.0		CL.	plastic, fine-grained sand, faint oxidation staining.	
28 - 0 to 96	- 24 — -				0.0		SP	Olive brown (2.5Y 4/4), SAND, wet to saturated, poorly graded, very fine to fine-grained, faint	Pellets
96 to 121 4" Sch 80 PVC 0.020 Slot  0 to 2.5 Concrete with Traffic Rated Well Box 2.5 to 4 Bentonite Chips 4 to 88 Pot India Cement wi 5% Bentonite Grout 88 to 93 Bentonite Pellets 93 to 123 Sand 123 to 125 Bentonite Pellets  30 - 34 - 34 - 34 - 34 - 34 - 34 - 34 -	- 26 — -								Bentonite Pellets
36-	- 28 — -							96 to 121	
	30 <i>—</i> -							123 to 129 Bertonite Penets	
36-	32— -								
	34 —								
7   18   18   18   18   18   18   18   1	6-								
	8-								

Notes: Boring total depth 125 feet. Groundwater encountered at approximately 67 feet. Boring completed as a groundwater monitoring well.

